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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,825	02/27/2004	Lifen Shen	LA0100 (NP)	6942

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EXAMINER

KRISHNAN, GANAPATHY

ART UNIT PAPER NUMBER

1623

DATE MAILED: 10/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/788,825	SHEN ET AL.	
	Examiner	Art Unit	
	Ganapathy Krishnan	1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

The amendment filed 7/18/2005 has been received, entered and carefully considered.

The following information provided in the amendment affects the instant application:

1. Claims 1, 8, 15, 22, 24 and 26 have been amended.
2. Remarks drawn to rejections under 35 U.S.C. 112, second paragraph, 102(b) and 103(a).

Claims 1-27 are pending in the case.

The text of those sections of Title 35, U. S. Code not included in this action can be found in a prior Office action.

Claim Objections

The objection to claim 15 has been overcome by amendment and applicant's arguments.

Claim Rejections - 35 USC § 112

Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been overcome by amendments and applicants arguments.

Claim Rejections - 35 USC § 102

Claims 1, 5, 7, 8, 14, 15, 20, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Czernecki et al (J. Org. Chem. 1991, 56, 6289-6292) is being maintained for reasons of record.

Claim Rejections - 35 USC § 103

Claims 1-4, 6, 9-13, 15-19 and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Czernecki et al (J. Org. Chem. 1991, 56, 6289-6292) in combination with Hawley's Condensed Chemical Dictionary, 13th Edition, 1997, page 180 and Grant and Hackh's Chemical Dictionary, 5th edition, 1987, page 436 is being maintained for reasons of record.

Response to Applicants Arguments

Applicants argue that:

1. Czernecki teaches a batch process for the preparation of glycosides at cryogenic temperatures. In contrast, the instant process the first step of forming the lithiated anion is carried out in a continuous process in a microreactor.

This is not found to be persuasive.

The process of instant claim 1 is drawn to making a glycoside by first carrying out the lithiation of an aromatic reactant having a leaving group at non-cryogenic conditions (above -20°C) and then in a second step coupling the lithiated anionic aromatic species with a carbonyl substituted reactant to form a glycoside. According to the claim recitation the coupling of the lithiated anionic aromatic species with the carbonyl compound need not necessarily be carried out at non-cryogenic conditions. There is no recitation regarding the yield. Czernecki's process comprises a first step of lithiation of an aryl bromide at room temperature (above -20°C; non-cryogenic) followed by reaction of the lithiated anionic aromatic reactant with a sugar (carbonyl substituted reactant) to form a glycoside (page 6291, right column, see description for preparation of compound 8a). The instant claims are also drawn to a glycoside. This embraces

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any glycoside including one that is protected. Czernecki et al teach greater than 80% yields of a protected glycoside (compound 8a). This teaching of Czernecki et al anticipates the instant claims 1, 5, 7, 8, 14, 15, 20, 21 and 22 and for the reasons above and those advanced in the previous office action, also render obvious instant claims 1-4, 6, 9-13, 15-19 and 23-27.

In Table 1 (page 5 of applicants response) the instant continuous run in a microreactor comprises the lithiation step performed at -10°C (non-cryogenic condition) followed by the coupling step performed at -78°C (cryogenic condition). This same combination of conditions has not been done for the batch process for a proper comparison. Instant claim 1 is drawn to lithiation at non-cryogenic condition and coupling to carbonyl-substituted reactant at cryogenic conditions (the claim doesn't recite any condition for the coupling step).

It is well established that batch and continuous processes are not patentably distinct. In re Dilnot, 319 F.2d 188, 138 U.S.P.Q. 248 (C.C.P.A. 1963).

Conclusion

Claims 1-27 are rejected

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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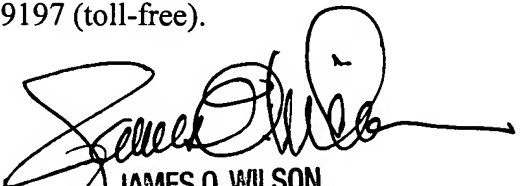
will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ganapathy Krishnan whose telephone number is 571-272-0654. The examiner can normally be reached on 8.30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GK



JAMES O. WILSON
SUPERVISORY PATENT EXAMINER
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